

PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE

(Attorney Docket No. 05-434-B)

In re Application of:)
)
Woo Seog Koo) Examiner: TBA
)
International Application No.: PCT/KR2004/01856) Group Art Unit: 2616
U.S. Application No.: 10/560,142)
) Confirmation No. 1170
International Filing Date: July 23, 2004)
U.S. Filing Date: December 9, 2005)
)
For: Method for Establishing an ATM Traffic)
Channel Path Between a BSC and a BTS)
In An EV-DO System)

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**PETITION UNDER 37 C.F.R. § 1.47(b) BY PERSON HAVING
PROPRIETARY INTEREST TO FILE APPLICATION ON
BEHALF OF INVENTOR**

Dear Sir:

Pursuant to 37 C.F.R. § 1.47(b), UTStarcom, Inc., the owner of *UTStarcom Korea Limited*, and the assignee in fact of the above-identified patent application, submits this Petition and respectfully requests the U.S. Patent Office to allow UTStarcom, Inc, to make the Application on behalf of inventor Woo Seog KOO, who we have been unable to locate.

This Petition is being submitted with: (i) a Declaration and Power of Attorney signed by Robert J. Irvine, III, a person authorized by UTStarcom, Inc. to sign on its behalf; (ii) a Statement Establishing Proprietary Interest By Person Signing on Behalf of Nonsigning Inventor and Statement Under 37 C.F.R. § 3.73(b); and (iii) a Declaration in Support of Filing on Behalf of the Nonsigning Inventor.

11/07/2006 ATRAH1 00000120 10560142

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200.00 0P

The last known address of nonsigning inventor Woo Seog Woo, who is a citizen of Korea, is:

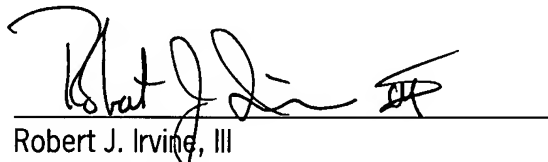
Jugong Apartment 115-303
470 Anheung-dong, Icheon-si
Gyeonggi-do 467-712
Republic of Korea

UTStarcom, Inc. respectfully submits that Woo Seog KOO is unreachable to execute the Declaration for the present application. Every attempt to obtain his signature has been unsuccessful. As evidenced by the accompanying declaration of Jiwon Lim, continuous and diligent efforts have been made to obtain Woo Seog KOO's signature on the declaration for this case. Based on such diligent efforts to obtain Woo Seog KOO's signatures on the declaration for this case, we believe that the requirements of 37 C.F.R. § 1.47(b) and MPEP § 409.03 have been met.

Filing of the application without Oath or Declaration executed by Woo Seog KOO is necessary to preserve the rights of Applicant UTStarcom, Inc. Applicant UTStarcom, Inc. will suffer irreparable harm if not allowed to apply for a patent for the above-referenced Application because the United States Patent and Trademark Office will hold the present Application abandoned if it is without an executed Oath or Declaration.

This Petition is being submitted with the fee set forth in 37 C.F.R. § 1.17(g), which is currently set at \$200.00.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert J. Irvine, III", is written over a horizontal line.

Robert J. Irvine, III

Registration No. 41,865

McDonnell Boehnen Hulbert & Berghoff LLP

300 South Wacker Drive, Ste. 3100

Chicago, IL 60606

Tel: 312 913 0001

Fax: 312 913 0002

Date: October 27, 2006

UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket No. 05-434-B)

In re Application of:)
)
Woo Seog KOO) Examiner: TBA
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International Application No.: PCT/KR2004/001856) Group Art Unit: 2616
U.S. Application No.: 10/560,142)
) Confirmation No. 1170
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For: Method For Establishing An ATM Traffic)
Channel Path Between A BSC and A BTS)
In An EV-DO System)

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**DECLARATION IN SUPPORT OF PETITION UNDER 37 C.F.R. § 1.47(b) BY PERSON
HAVING PROPRIETARY INTEREST TO FILE APPLICATION ON BEHALF OF INVENTOR**

Dear Sir:

This Declaration is in support of Petition under 37 C.F.R. § 1.47(b) to allow
UTStarcom, Inc. to make the application on behalf of inventor Woo Seog KOO, who we have
been unable to locate.

1. I, **Jiwon LIM**, am a paralegal at the law firm Kim & Chang.
2. I have first-hand knowledge of the facts recited herein.
3. This Declaration is in support of U.S. Patent Application entitled "METHOD
FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH BETWEEN A BSC AND A BTS IN AN EV-

DO SYSTEM," filed in the U.S. Patent Office on December 9, 2005 and bearing U.S. Application No. 10/560,142 and International Application No. PCT/KR2004/001856.

3. I am a paralegal at the law firm Kim & Chang, located at Hungkuk Life Insurance Building, 9F, 226 Sinmunno 1-ga, Jongno-gu, Seoul 110-786, Korea.

4. Kim & Chang represents UTStarcom Korea Limited, a subsidiary of UTStarcom, Inc.

5. I am a citizen of Korea, residing at 840-7 Mia-dong, Gangbuk-gu, Seoul 142-820, Republic of Korea.

6. On March 7, 2006, I sent a letter, via content-certified mail, including assignment documents and the Inventor's Declaration of Invention, to Mr. Woo Seog KOO's last known physical address (Jugong Apt. 115-303, 470 Anheung-dong, Icheon-si, Gyeonggi-do 467-712, Republic of Korea). (See attached Exhibit 1).

7. On March 8, 2006, I sent the same letter, with attached assignment documents, to the Mr. KOO's last-known e-mail address (wskoo@msn.com). (See attached Exhibit 2).

8. On March 8, 2006, the content-certified package mailed to Mr. KOO was returned due to an incorrect address. (See attached Exhibit 3).

9. I searched for Mr. KOO's phone number, but Korea Info Services Corporation confirmed that no number was registered under Mr. KOO's address or name.

10. I have gotten no response to the e-mail sent to Mr. KOO on March 8, 2006.

11. I hereby declare that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and

the like so made under penalty of perjury and that such willful false statements may jeopardize the validity of the specification or any patent issued thereon.

Respectfully submitted,

Date: Oct. 24, 2006

By: Jiwon Lim
Jiwon LIM
Kim & Chang
Hungkuk Life Insurance Building, 9F,
226 Sinmunno 1-ga, Jongno-gu,
Seoul 110-786, Korea

EXHIBIT 1

KIM & CHANG

Hungkuk Life Insurance Building, 9F, 226 Sinmunno 1-ga, Jongno-gu, Seoul 110-786, Korea
Telephone: (822) 764-8855 / 2122-3900 Fax: (822) 741-0328 / 745-5954 / 763-7434

E-Mail: all@ip.kimchang.com

March 7, 2006

To. Woo Seog Koo (e-mail: wskoo@msn.com)
Jugong Apt. 115-303, 470 Anheung-dong, Icheon-si, Gyeonggi-do 467-712,
Republic of Korea

Re. Declaration and Power of Attorney and Assignment to be filed with U.S.
Patent and Trademark Office (U.S. Serial No. 10/560,142)
K&C Ref.: GP048360

I hope your business is prospering.

I am a patent attorney for a law firm, Kim & Chang, and contacting you on behalf of my client UTStarcom Korea Limited.

You had assigned your invention as identified on the next page to your former company in 2002, which was conceived when you were working for Hyundai Electronics Industries, Co., Ltd./ Hyundai Syscomm, Inc. under the provisions of the employee's invention compensation policy of the company. Therefore, the right to receive patent for the invention was transferred to the former company. Recently, the right to receive patent was transferred to our client, UTStarcom Korea Limited, hereinafter referred to as "UTSK" from your former company. With respect to this invention, a Korean patent application was filed and its counterpart U.S. patent application has recently been filed with the U.S. Patent and Trademark Office. According to the U.S. Patent law, the inventor is only entitled to be an applicant for a patent application. Therefore, although the right to receive patent has been transferred to our client, UTSK, the U.S. Patent and Trademark Office requires filing of documents as enclosed herewith which must be signed by the inventor.

With regard to the assignment, please be informed that signing the enclosed assignment does not mean that you newly transfer something another to somebody, it merely means confirming that you had already assigned the right to receive patent in 2003. As for the Declaration, the signing the declaration means that you are declaring that you are the

true and sole inventor of this invention.

As explained above, I enclose herewith these documents. Please sign and date the marked portions and return them to us via courier, registered mail or whatever is convenient for you. Any costs to be incurred in this connection are surely responsible to our side. Please send us any receipts for payment in return.

Return Address: Hungkuk Life Insurance Building, 9F, 226 Sinmunno 1-ga, Jongno-gu, Seoul 110-786, Korea

Title of Invention: METHOD FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH BETWEEN AN BSC AND A BTS IN AN EV-DO SYSTEM

-Contact Person: Manager Hee Jae IM /
Attorney Jee Hong YOON
-Telephone: 02-2122-3822 / 02-2122-
3515
-Mobile: 010-4787-7275
-E-mail: zhjim1@ip.kimchang.com

Attorney Jee Hong YOON (seal)

Enclosure(s)

GWANG WHA MOON POST
OFFICE- CONTENTS CERTIFIED
MAIL CERTIFICATE NO.
10042201, 2006-03-07

金 · 張 法律事務所

서울시 종로구 신문로 1가 226 흥국생명빌딩 9층 우편번호 110-786

Website: www.ip.kimchang.com E-Mail: all@ip.kimchang.com

전화: (02) 764-8855 / 2122-3900 Fax: (02) 745-5954 / 741-0328 / 763-7434

2006년 3월 7일

수 신 : 구 우 석 님

경기도 이천시 안흥동 470 주공아파트 115동 303호 (우. 467-712)

E-mail: wskoo@msn.com

제 목 : 미국 특허청 제출용 서명서류 송부의 건 (U.S. Serial No. 10/560,142)

당소 정리 번호 : GP048360

귀하의 사업에 무궁한 발전을 기원합니다.

당소는 유티스타콤 코리아 유한회사의 대리인인 김&장 특허법률사무소입니다.

귀하께서는 2002년도에 현대전자산업 주식회사/현대시스콤 재직 중에 개발하신 아래의 발명에 대한 권리를 당시 소속회사의 직무발명 양도규정에 따라 소속회사에 양도하였으며, 현재 이 발명에 대해 특허를 받을 수 있는 권리는 귀하의 소속회사로부터 당소의 의뢰인인 유티스타콤 코리아 유한회사로 이전되어 있는 상태에 있습니다. 이 발명에 대하여는 한국 특허출원을 하고 이어서 현재 미국 특허출원을 진행 중에 있는데, 미국의 특허제도에 따르면 출원시 발명자가 출원인이 되어야 하기 때문에 미국 특허청은 특허를 받을 수 있는 권리가 당소의 의뢰인에게 있다 하더라도 첨부된 바와 같은 서류에 출원인으로서 발명자가 직접 서명한 후 이를 제출하도록 요구하고 있습니다.

첨부된 서류 중 양도증(assignment)과 관련해서는, 귀하께서 이미 이 발명에 대한 권리를 양도한 상태이기 때문에 첨부된 양도증은 이를 확인하는 절차에 불과하며 새로이 무언가를 양도하는 것은 아님을 알려드립니다. 발명자 선언서(declaration)는 귀하께서 이 발명의 발명자임을 선언하는 내용으로 되어 있습니다.

이와 같은 사정으로 첨부 서류를 보내드리오니 서명 후 당소로 반송하여 주시기를 부탁드립니다. 반송은 퀵서비스(착불) 등 귀하께서 편한 방법으로 아래의 당소 주소로 해 주시고 어떤 경우에도 당소에서 비용을 부담할 것이오니 비용 영수증 등도 함께 반송하여 주시면 감사하겠습니다.

반송 주소: 서울시 종로구 신문로 1가 226 홍국생명빌딩 9층 김.장특허법률사무소
(우편번호 110-786)

발명의 명칭: METHOD FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH
BETWEEN AN BSC AND A BTS IN AN EV-DO SYSTEM

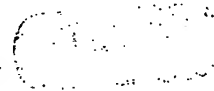
-담당자: 임 회 재 차장 / 윤 지 홍 변리사

-전화: 02-2122-3822 / 02-2122-3515

-Mobile: 010-4787-7275

-E-mail: zhjim1@ip.kimchang.com

변리사 윤 지 홍



첨부있음.



이 무늬물은 2006-03-01 제 10042201
호에 의하여 내용증명우편물로
발송하였음을 증명함

광화문 우체국장

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH BETWEEN A BSC AND A BTS IN AN EV-DO SYSTEM

the specification of which is attached hereto unless the following space is checked:

☒ was filed on December 9, 2005 as United States Application Serial Number 10/560,142.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 (including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application).

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

	<u>Number</u>	<u>Country</u>	<u>Day/Month/Year Filed</u>
1.	PCT/KR2004/001856	PCT	23 July 2004
2.	10-2003-0051157	Korea	24 July 2003

I hereby appoint the practitioners associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and I direct that all correspondence be addressed to that Customer Number.

Customer Number: **020306**

Principal attorney or agent: Robert J. Irvine, III

Telephone number: 312-913-0001

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: Woo Seog KOO

Inventor's signature: _____

Date: _____

Residence: Jugong Apt. 115-303, 470, Anheung-dong, Icheon-si, Gyeonggi-do 467-712, Republic of Korea

Citizenship: Republic of Korea

Post Office Address: Jugong Apt. 115-303, 470, Anheung-dong, Icheon-si, Gyeonggi-do 467-712, Republic of Korea

ASSIGNMENT

Case No.: 05-434-B
Inventor: **Woo Seog KOO**
Date of Execution
of Application:

Serial No.: 10/560,142

Filing Date: December 9, 2005

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to:

UTSTARCOM KOREA LIMITED

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

**METHOD FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH
BETWEEN A BSC AND A BTS IN AN EV-DO SYSTEM**

and identified as:

Case No. 05-434-B

in the offices of McDONNELL BOEHNEN HULBERT & BERGHOFF LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorizes and requests the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrants himself to be the owner of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrants that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

- 1 -

For said considerations the undersigned hereby agrees, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorizes said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agrees, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Woo Seog KOO

WITNESS my hand and seal this ____ day of _____, 2006.

Woo Seog KOO

Woo Seog KOO

State of _____

County of _____

The foregoing instrument was acknowledged before me this ____ day of

_____, _____ by _____

NOTARY PUBLIC

직무 발명 신고서


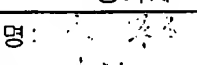
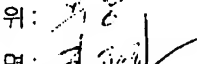
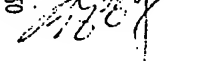
신고일: 2002년 월 일

발 명 실	결 재	업무코드		승인권자	현 장 관 리 자	경 도	법 제 특 허 부	결 재	업무코드		승인권자
		주발명자	경도	팀장					기안	경도	승인
	직위/성명	DL/구우석	CJ/임성환	BJ/황준하	/	직위/성명	hw0301	12.5074			
	일 자	11/29	11/29	11/29	관리번호	일 자					
	보존년한	0, 1, 2, 3, 5, 10, 영구				보존년한	1, 3, 5, 10, 영구	보안등급	1, 2, 3 대외비		

사내 직무발명보상기준에 의거하여 출원/등록을 의뢰하며, 국내/외 등록권리를 양도합니다.

발 명 자 기 재 사 항	발명의 명칭	EV-D0 시스템의 제어국의 SF와 기지국의 채널카드 간의 ATM 트래픽 채널 패스 설정 방법		
	발명의 개요	본 발명은 Qualcomm의 EV-D0 시스템을 근간으로 ATM 통신망을 기반으로 하여 상용화하는 과정에서 설계 및 구현된 제어국의 SF 블록과 기지국의 채널카드 블록(HCCA)간의 ATM 패스 설정 및 패스 설정을 위한 정보 교환 방법에 관한 내용을 특허로 한다.		
	관련PROJECT명	EV-D0		
	실 시 상 황	<input type="checkbox"/> 착상 <input type="checkbox"/> 설계완료 <input type="checkbox"/> 시험(중, 완료) <input checked="" type="checkbox"/> 사업화(준비중, 실시중)		
	본발명의 발표상황	<input checked="" type="checkbox"/> 미발표 <input type="checkbox"/> 발표예정 <input type="checkbox"/> 既발표 ※ 既발표 또는 발표 예정인 경우 발표(예정)일과 관련논문등 기입 요망 [발표(예정)일: 2000년 월 일, 관련논문:]		
	선행특허자료	국 내		
		외 국		
출원완급	<input type="checkbox"/> 보 통 <input type="checkbox"/> 지 급-->(일이내)		지급출원	이 유
외국출원	<input checked="" type="checkbox"/> 유 (이유: EV-D0관련 최근 기술임.) <input type="checkbox"/> 무			
KEY WORD				

법 제 특 허 부 기 재 사 항	접 수 일	2002년 11월 20일	대리인	홍승현	전담자관리번호	H/2002-12-0182
	국내출원	<input checked="" type="checkbox"/> 특허 <input type="checkbox"/> 실용 <input type="checkbox"/> 공개기보 <input type="checkbox"/> 출원보류(이유:)				
		심사청구	<input type="checkbox"/> 유 <input checked="" type="checkbox"/> 무	전략특허PROJECT명	14	
	외국출원	<input type="checkbox"/> 유 <input type="checkbox"/> 무		출원등급	B	
		심의여부	<input type="checkbox"/> 유 <input type="checkbox"/> 무	*대리인 특허명세서작성 참조사항*		
	출 원 국 가 선 정	<input type="checkbox"/> 개별국출원 <input type="checkbox"/> EPO출원 <input type="checkbox"/> PCT출원		<input type="checkbox"/> 사무소 자체 국내출원 <input checked="" type="checkbox"/> 특허팀검토후 국내출원 <input type="checkbox"/> 국내외 동시출원		
		1순위		5순위		검 토 의 견
2순위			6순위			
3순위			7순위			
4순위			8순위			
비고						

< 발명 평가내용 >				
구 분	내 용		평가점수	
기 술 성	단순 조합 기술임		<input type="checkbox"/> 1점	
	약간 높은 수준을 요하는 기술임		<input checked="" type="checkbox"/> 3점	
	고도의 수준을 요하는 기술임		<input type="checkbox"/> 5점	
실현가능성	이론상 실현은 가능하나, 실험계획은 없음		<input type="checkbox"/> 1점	
	테스트 하려면 관련기술의 발전이 요구됨		<input checked="" type="checkbox"/> 2점	
	테스트중이거나 예정임		<input type="checkbox"/> 3점	
	양호한 테스트 결과 얻음(자료첨부 가능)		<input type="checkbox"/> 5점	
	현재 사업화 준비중 또는 실시중임		<input type="checkbox"/> 7점	
효 과	개선된 효과의 수준은? (공정 단순화, Yield, Cost 등의 측면)		<input type="checkbox"/> 3점 <input checked="" type="checkbox"/> 2점 <input type="checkbox"/> 1점	
발명중요도	기술공개로 타사 권리확보를 방어하는 수준임		<input type="checkbox"/> 1점	
	양산에 적용(예정) 가능한 발명임		<input checked="" type="checkbox"/> 3점	
	반드시 필요한 독점 기술임		<input type="checkbox"/> 5점	
평가결과			(10) 점	
주)※상기 발명 평가표는 반드시 실장이 직접 기재하시기 바랍니다. ※"실현가능성"란에서 5점,7점에 해당된 발명은 증빙 자료가 반드시 필요 합니다. ※평가를 완료하신후 평가결과를 기입 바랍니다.				
< 외국출원 평가내용 >				
발명의 적용제품 현 황	*적용제품:	*복수제품에 적용되는 경우 전부 기재하시기 바라며, 향후 적용 제품경우 예상시점을 기재요망		
	*관련기술:			
	*적용시기:			
평가내용	<input type="checkbox"/> 절대 필요 <input type="checkbox"/> 국내출원후 1년간 관망 <input checked="" type="checkbox"/> 필요 없음		출원희망국가	
	<input type="checkbox"/> 개별국출원, <input type="checkbox"/> EP0출원, <input type="checkbox"/> PCT출원		1순위	
	기술적측면 		2순위	
			3순위	
			4순위	
			5순위	
			6순위	
			7순위	
			8순위	
경제적측면		평가자		
		성명:  직위:  서명: 		

발명실장
기재사항

발명자 인적사항	발명자 1	성명	(한글) 구우석	(소프트웨어) 개발 Group (호처리)실				
			(한문) 具佑奭	직위	대리	사번	H17203	TEL (031-639-8012)
			(영문) Koo, Woo Seog	주민등록No	671006- 722222			
		E-mail	wskoo@hvsyscomm.com	주소	(467-802)경기 아천 안흥470 주공APT 115-303			서명
	발명자 2	성명	(한글)	() 개발 Group ()실				
			(한문)	직위		사번		TEL ()
			(영문)	주민등록No	-			
		E-mail		주소	(-)			서명
	발명자 3	성명	(한글)	() 개발 Group ()실				
			(한문)	직위		사번		TEL ()
			(영문)	주민등록No	-			
		E-mail		주소	(-)			서명
	발명자 4	성명	(한글)	() 개발 Group ()실				
			(한문)	직위		사번		TEL ()
			(영문)	주민등록No	-			
		E-mail		주소	(-)			서명
	발명자 5	성명	(한글)	() 개발 Group ()실				
			(한문)	직위		사번		TEL ()
			(영문)	주민등록No	-			
		E-mail		주소	(-)			서명
	발명자 6	성명	(한글)	() 개발 Group ()실				
			(한문)	직위		사번		TEL ()
			(영문)	주민등록No	-			
		E-mail		주소	(-)			서명

주1. 주소는 상세히 기재하시고, E-mail은 반드시 회사계정으로 기재하시기 바람.

2. 영문기재시 Fullname을 기재하시기 바람.

발명의 명세서

1. 발명의 명칭

EV-DO 시스템의 제어국의 SF와 기지국의 채널카드 간의 ATM 트래픽 채널 패스 설정 방법

2. 발명의 상세한 설명

1) 산업상의 이용분야

ATM 망을 기반으로 하는 EV-DO 시스템에서 기지국과 제어국간 ATM 트래픽 패스 설정에 이용할 수 있다.

2) 기술의 설명 및 그 문제점

EV-DO 시스템의 초기 모델인 Qualcomm 사의 EV-DO 제품은 IP 통신망을 기반으로 설계 및 구현되어 있다. 그러나 필요에 따라 다른 프로토콜 인터페이스를 기반으로 통신을 처리할 필요가 있다. 특히 ATM 망을 기반으로 통신을 설정하는 경우 모든 것이 새롭게 설계 구현되어야 한다.

본 발명은 Qualcomm 의 EV-DO 시스템을 근간으로 ATM 통신망을 기반으로 하여 상용화하는 과정에서 설계 및 구현된 제어국의 SF 블록과 기지국의 채널카드 블록(HCCA)간의 ATM 패스 설정 및 패스 설정을 위한 정보 교환 방법에 관한 내용을 특허로 한다.

3) 문제점을 해결하기 위한 본 발명의 기술적 원리

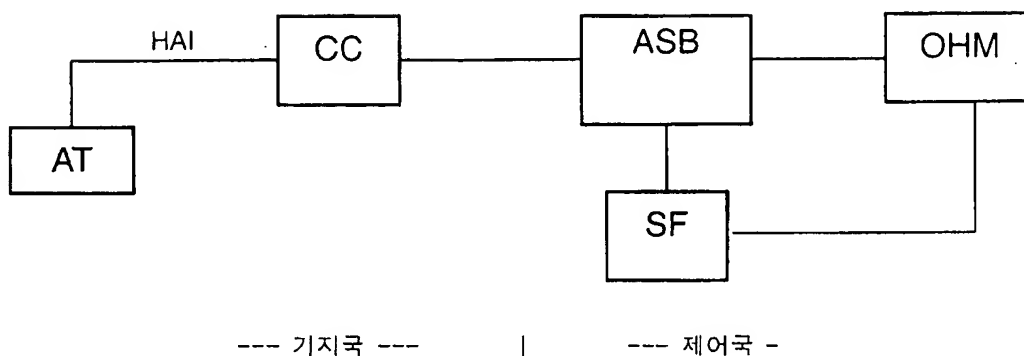
본 발명의 기술적 원리는 기존의 기지국과 제어국간의 메시지를 변경하고 추가하여 해당 ATM 패스 정보를 추가로 교환하는 방법을 이용하고 있다. 즉, 제어국 SF 블록은 기지국의 채널카드와 ATM 패스를 설정하기 위하여 채널카드의 ATM 패스 정보가 필요하다. 그래서 기존 메시지를 최대한 반영하고 새롭게 메시지를 추가하여 ATM 패스 정보를 교환한 다음 ATM 경로를 동적으로 세팅한다.

4)본 발명의 구성 및 그 전반적인 동작설명

1. 전체 시스템 구조

EV-DO 시스템의 SF 블록은 제어국에 위치하고 있다. 채널카드 블록(HCCA)는 기지국에 위치하고 있다. 채널카드 블록은 단말기(AT: Access Terminal)와 SF 블록간의 중계 역할을 한다.

SF와 채널카드 블록 및 기타 엔티티 간의 상호 관계는 다음과 같다.

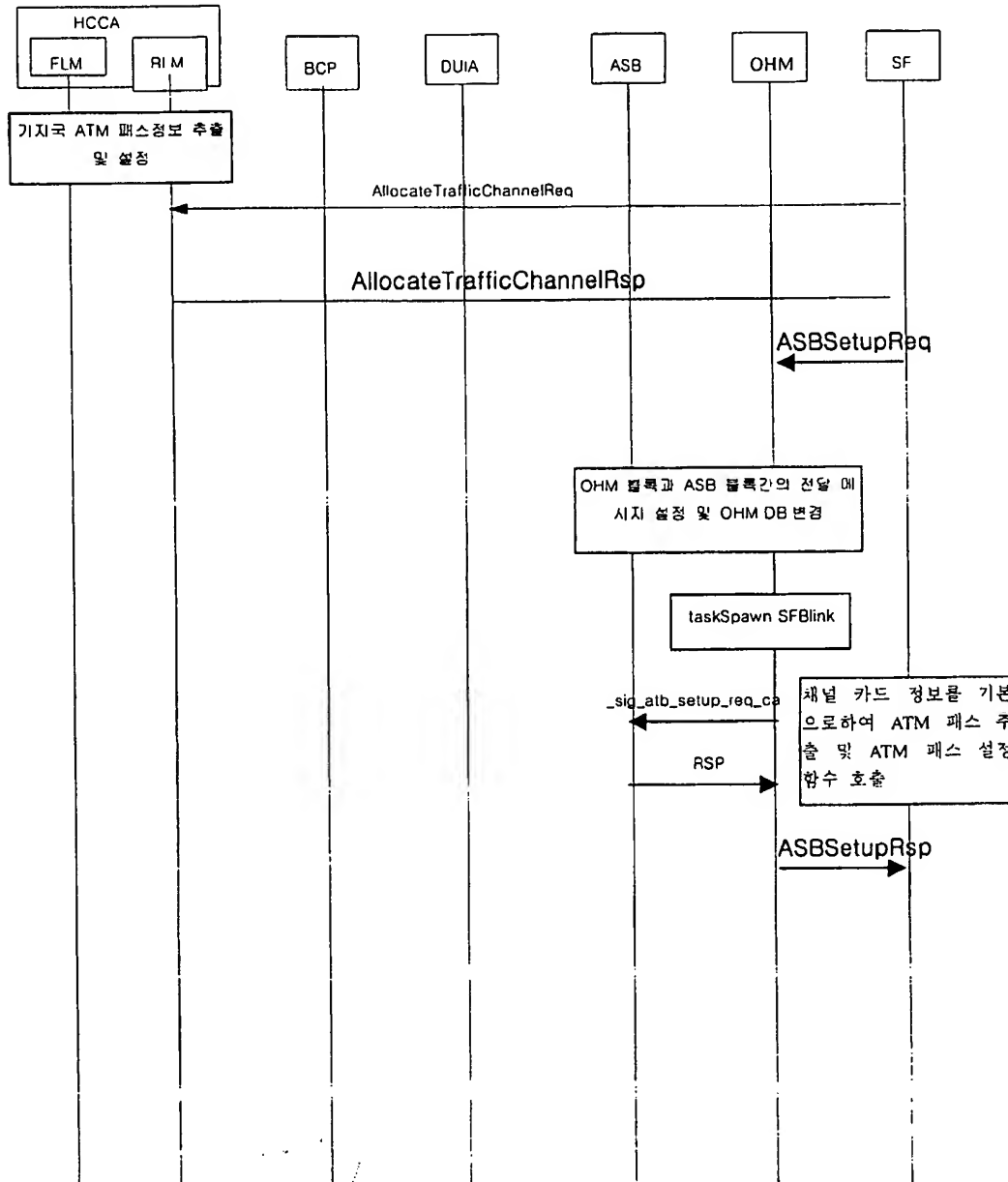


<SF, CC, OHM, ASB(ATM Switch Block) 관계도>

전체 시스템 구성 중 기지국의 ATM 설정과 제어국의 ATM 패스 설정이 필요한데, 본 발명에서는 제어국의 ATM 패스설정에 관한 내용만 발명으로 한다.

2. SF S/W 블록간 메시지 흐름

다음 호처리 흐름도는 단말로부터의 호 설정 메시지를 수신하여 처리하는 과정 중 ATM 패스 설정을 위한 메시지 흐름도를 중심으로 표현한 내용이다. (굵은 표시 메시지가 추가 및 변경된 호처리 메시지)



<ATM S/W 설정을 위한 호처리 메시지 흐름도>

3. 블록간 메시지

3.1 AllocateTrafficChannelRsp Message (변경된 메시지)

전송방향 : 기지국(채널블록) → 제어국(SF 블록)

Type	Attribute	Value
word16	functionId	2501
word32	callId	
word16	RSMId	0 ~ 7
word16	pilotOffset	
byte	status	
byte	powerControlBitNumber	
word32	FLMIPAddress	
word16	ftcServerPort	
word32	RLMIPAddress	
word16	rxServerPort	
추가 항목		
byte	bcpld	0 ~ 64
byte	btsSectorIdx	0 ~ 2
byte	lfc_cclD	0 ~ 1
byte	ftc_cclD	0 ~ 64
byte	ftcBaiald	0 ~ 1
byte	ftcLinkId	0 ~ 7
byte	rx_cclD	0 ~ 1
byte	rx_cclD	0 ~ 64
byte	rxBaiald	0 ~ 1
byte	rxLinkId	0 ~ 7

3.2 ASBSetupReq (신규 메시지)

전송방향 : 제어국(SF 블록) → 제어국(OHM 블록)

Type	Attribute	Value
word16	RsmId	0 ~ 7
byte	Bcpld	0 ~ 64
byte	SectorId	0 ~ 2
byte	FtcCclD	0 ~ 1
byte	FtcCclD	0 ~ 64
byte	FtcBaiald	0 ~ 1
byte	FtcBlinkId	0 ~ 7
byte	FtcStPortId	0 ~ 2
byte	RxcCclD	0 ~ 1
byte	RxcCclD	0 ~ 64
byte	RxcBaiald	0 ~ 1
byte	RxcBlinkId	0 ~ 7
byte	RxcStPortId	0 ~ 2

3.3 ASBSetupRsp (신규 메시지)

전송방향 : 제어국(SF 블록) ← 제어국(OHM 블록)

Type	Attribute	Value
word16	<i>RsmId</i>	0 ~ 7
byte	<i>Result</i>	0: Fail, 1: Success
word16	<i>FtcSfToAtbVpi</i>	0 ~ 512
word16	<i>FtcSfToAtbVci</i>	0 ~ 1024
word16	<i>RxcSfToAtbVpi</i>	0 ~ 512
word16	<i>RxcSfToAtbVci</i>	0 ~ 1024

5)본 발명의 다른 실시예

없음.

6)본 발명의 효과

EV-DO 시스템을 ATM 통신망을 기반으로 하는 통신망에서 기지국과 제어국간에 ATM 패스 설정할 때 이용할 수 있다. IP 기반의 통신망에서 ATM 기반의 통신망으로 전환할 때 최소의 변경으로 가능하다.

3.발명의 권리보호 범위

본 발명 전체, ATM 인터페이스 설정을 위하여 추가 변경된 메시지 부분, ATM 경로 설정을 위하여 추가된 블록간의 메시지 부분.

4.도면의 간단한 설명

없음.

EXHIBIT 2

[E-mail to the inventor Woo Seog Koo from K&C staff, Jiwon Lim]

From: zjwlim (Ji-Won Lim)
Date: Mar 8, 2006 3:12 PM
To: wskoo@msn.com
Cc: zhjim1(Hee-Jae Im); jhyoon (Jee-Hong Yoon)
Subject: [To. Mr. Woo Seog Koo] An announcement from Law offices of Kim & Chang
Attachment(s): FE241488-WSK-LETTER.pdf; FE241488-WSK-SIGNATURE
DOCUMENTS.pdf; FE241488-WSK-INVENTOR'S DECLARATION.pdf

To. Woo Seogn Koo (e-mail: wskoo@msn.com)
Jugong Apt. 115-303, 470 Anheung-dong, Icheon-si, Gyeonggi-do 467-712,
Republic of Korea
Re. Declaration and Power of Attorney and Assignment to be filed with U.S.
Patent and Trademark Office (U.S. Serial No. 10/560,142)
K&C Ref.: GP048360

Dear Mr. Koo,

Hello. This is an announcement from Kim & Chang Law Offices.

Enclosed herewith please find scanned copies of our letter dated March 7, 2006 sent to you via content-certified mail. Please review the attached documents. When you receive the original documents, please sign and date the marked portions, and return them to us.

Thank you for your cooperation in this matter.

Law Offices of Kim & Chang
Attorney Jee Hong YOON (Tel. 82-2-2122-3515)
Manager Hee Jae IM (Tel. 82-2-2122-3822)

For more information regarding the documents, please contact Jiwon Lim (Tel. 82-2-2122-3838)

Ji-Won Lim
zjwlim@ip.kimchang.com

KIM & CHANG
Hungkuk Life Insurance Building, 9F, 226 Sinmunno 1-ga, Jongno-gu, Seoul 110-786, Korea
Tel.: (822) 764-8855 / (822) 2122-3900 (Operator)
Fax.: (822) 741-0328 / (822) 745-5954 / (822) 763-7434

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zjwlim (Ji-Won Lim)

보낸 사람: zjwlim (Ji-Won Lim)

보낸 날짜: 2006년 3월 8일 수요일 오후 3:12

받는 사람: 'wskoo@msn.com'

참조: jhyoon (Jee-Hong Yoon); zhjim1 (Hee-Jae Im)

제목: [구우석님] 김.장법률사무소입니다.

첨부 파일: FE241488-구우석-안내문.pdf; FE241488-구우석-서명서류.pdf; FE241488-구우석-발명신고.pdf

수 신 : 구 우 석 님

경기도 이천시 안흥동 470 주공아파트 115동 303호 (우.467-712)

E-mail: wskoo@msn.com

제 목 : 미국 특허청 제출용 서명서류 송부의 건 (U.S. Serial No. 10/560,142)

당소 정리 번호 : GP048360

안녕하세요. 김장법률사무소 입니다.

2006년 3월 7일자로 우편발송(내용증명)한 서신의 사본을 스캔하여 첨부합니다. 본건과 관련한 상세한 사항은 첨부한 서신을 참조하시고, 우편으로 발송된 서신 원본을 받으시면 해당 서류에 서명하신 후 당소에 반송해 주시면 감사하겠습니다

귀하의 협조에 깊은 감사드립니다.

김.장특허법률사무소

변리사 윤 지 홍 (전화 02-2122-3515)

차장 임 희 재 (전화 02-2122-3822)

첨부있음.

(서명서류 관련 담당자: 과장 임 지 원 전화 02-2122-3838)

임지원(Ji-Won Lim)

zjwlim@ip.kimchang.com

직통 : (02) 2122 3838

金·張 法律事務所

서울시 종로구 신문로 1가 226 흥국생명빌딩 9층 우편번호 110-786

전화: (02) 764-8855 / (02) 2122-3900 (대표)

팩스: (02) 741-0328 / (02) 745-5954 / (02) 763-7434

위 전자우편에 포함된 정보는 위에 기재된 수신인만을 위해 발송되는 것으로서 보안을 유지해야 하는 정보 및 법률상 또는 다른 사유로 인하여 공개가 금지된 정보가 들어 있을 수 있습니다. 귀하가 이 전자우편의 지정 수신인이 아니면 이를 무단으로 보유, 전송, 배포할 수 없으며, 일부의 내용이라도 공개, 복사해서는 안됩니다. 그러므로, 잘못 수신된 경우에는 즉시 전화 또는 전자우편 주소(all@ip.kimchang.com)로 연락하여 주시고, 원본 및 사본과 그에 따른 첨부 문서를 모두 삭제하여 주시기 바랍니다.

2006-10-20

EXHIBIT 3

[Translation]

From Kim & Chang
To Mr. Woo Seog Koo
Jugong Apt. 115-303, 470 Anheung-dong, Icheon-si, Gyeonggi-do 467-712, Republic of Korea

[Mail Return Notice by Post Office]

☒ 1st delivery date: 2006-03-07

The returned mail will be stored in the Post Office by 2006-03-8

[Reason for Return]

☐ Recipient not present ☒ **Recipient has moved** ☐ Recipient refused to accept package ☐ Incorrect address
☐ Recipient does not reside at indicated address

KIM & CHANG

Hunguk Life Insurance Building, 9F
226 Sinmunno 1-ga, Jongno-gu
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TEL: (82-2)764-8855 / 2122-3900
FAX: (82-2)741-0328 / 745-5954 / 763-7434
E-MAIL: all@ip.kimchang.com
www.ip.kimchang.com

VIA AIR MAIL



결기도 이런서 안들음 400 3033

구 우 석 남 기라

467-712

PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE

(Attorney Docket No. 05-434-B)

In re Application of:)
)
Woo Seog Koo) Examiner: TBA
)
International Application No.: PCT/KR2004/01856) Group Art Unit: 2616
U.S. Application No.: 10/560,142)
) Confirmation No. 1170
International Filing Date: July 23, 2004)
U.S. Filing Date: December 9, 2005)
)
For: Method for Establishing an ATM Traffic)
Channel Path Between a BSC and a BTS)
In An EV-DO System)

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**STATEMENT ESTABLISHING PROPRIETARY INTEREST BY
PERSON SIGNING ON BEHALF OF NONSIGNING INVENTOR
AND STATEMENT UNDER 37 C.F.R. § 3.73(B)**

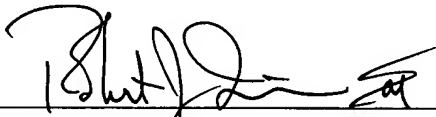
UTStarcom, Inc. has a sole proprietary interest in the present application. The invention, entitled "Method for Establishing an ATM Traffic Channel Path Between a BSC and a BTS In An EV-DO System," was originally assigned by the inventor to Hyundai Syscomm on November 29, 2002, as part of Hyundai Syscomm's employee invention compensation policy, and was filed as Korean National Application Number 2003-0051157 (Exhibit A). On April 27, 2004, UTStarcom, Inc., through its wholly owned subsidiary in Korea, UTStarcom Korea Limited, acquired Hyundai Syscomm's Intellectual Property Portfolio, including the rights to the above-referenced application, corresponding to Korean National Application Number 2003-0051157 (Exhibit B, page 45 of 46, entry number 1287). I establish this

proprietary interest by attaching a copy of the assignment of this invention by the nonsigning inventor to Hyundai Syscomm, Inc. recorded in reel number 018435 and frame number 0790 (Exhibit A), and a copy of the assignment of this invention by Hyundai Syscomm, Inc. to UTStarcom Korea Limited recorded in reel number 018424 and frame number 0902 (Exhibit B). As such, UTStarcom, Inc. is presently the assignee and owner of the rights to the above-referenced application.

This STATEMENT ESTABLISHING PROPRIETARY INTEREST BY PERSON SIGNING ON BEHALF OF NONSIGNING INVENTOR is made by Robert J. Irvine, III, a person authorized to act on behalf assignee UTStarcom, Inc.

Respectfully submitted,

Date: October 27, 2006

A handwritten signature in black ink, appearing to read 'Robert J. Irvine, III', written over a horizontal line.

Robert J. Irvine, III

Registration No. 41,865

McDonnell Boehnen Hulbert & Berghoff LLP

300 South Wacker Drive, Ste. 3100

Chicago, IL 60606

Tel: 312 913 0001

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

OCTOBER 25, 2006

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500169718A

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE
ROBERT J. IRVINE III
CHICAGO, IL 60606

500169718A

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RECORDATION DATE: 10/25/2006

REEL/FRAME: 018435/0790
NUMBER OF PAGES: 13

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: 05-434-B

ASSIGNOR:
KOO, WOO SEOG

DOC DATE: 11/29/2002

ASSIGNEE:
HYUNDAI SYSCOMM, INC.
SAN 136-1, AMI-RI, BUBAL-EUB,
ICHEON-SI
GYEONGGI-DO, DEM REP OF KOREA

467-701

018435/0790 PAGE 2

SERIAL NUMBER: 10560142

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: METHOD FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH BETWEEN A BSC
AND A BTS IN AN EV-DO SYSTEM

ASSIGNMENT SERVICES BRANCH
PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

10/25/2006
 500169718

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Woo Seog Koo	11/29/2002
RECEIVING PARTY DATA	
Name:	Hyundai Syscomm, Inc.
Street Address:	San 136-1, Ami-Ri, Bubal-eub, Icheon-si
City:	Gyeonggi-do
State/Country:	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
Postal Code:	467-701
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	10560142
CORRESPONDENCE DATA	
Fax Number:	(312)913-0002
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	3129130001
Email:	docketing@mbhb.com
Correspondent Name:	McDonnell Boehnen Hulbert & Berghoff LLP
Address Line 1:	300 South Wacker Drive
Address Line 2:	Robert J. Irvine III
Address Line 4:	Chicago, ILLINOIS 60606
ATTORNEY DOCKET NUMBER:	05-434-B
NAME OF SUBMITTER:	Robert J. Irvine III
Total Attachments: 11 source=05-434-B-Assignment#page1.tif source=05-434-B-Assignment#page2.tif source=05-434-B-Assignment#page3.tif	

CH \$40.00 10560142

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Employee's Declaration of Invention

Date:, 2002

Under the provisions of the employee's invention compensation policy, I request to proceed with the filing/registration of my invention and to assign its rights for domestic and international registrations.

Date of Receipt		Nov. 30, 2002		Agent		Moon		Hyundai Syscomm Ref.		HJ2002-12-0182	
Korean Filing		<input checked="" type="checkbox"/> Patent <input type="checkbox"/> Utility Model <input type="checkbox"/> Journal of Technical Disclosure <input type="checkbox"/> Withhold Filing (Reason: _____)									
		Request for Examination		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Strategic Patent Project for the Invention			14		
Foreign Filing		<input type="checkbox"/> Yes <input type="checkbox"/> No				Filing Rating			B		
		Deliberation		<input type="checkbox"/> Yes <input type="checkbox"/> No		*Remarks for Agents writing the specification*					
Designating Countries to File	<input type="checkbox"/> Direct National Filing <input type="checkbox"/> EPO Filing <input type="checkbox"/> PCT Filing						<input type="checkbox"/> Domestic filing without Review <input checked="" type="checkbox"/> Domestic filing after Patent Team Review <input type="checkbox"/> Simultaneous Korean & Foreign Filing				
	1st Priority				5th Priority				Reviewer's Opinion	OK	
	2nd Priority				6th Priority						
	3rd Priority				7th Priority						
	4th Priority				8th Priority						
	Note										

Statement by Manager of Invention Team	< Evaluation of the Invention >		
	Category	Contents	Evaluation Grade
	Technology	Simple technology	<input type="checkbox"/> 1 point
		Slightly higher technology	<input checked="" type="checkbox"/> 3 point
		Advanced technology	<input type="checkbox"/> 5 point
	Possible Implementation	Theoretically possible to implement, but has no plan for testing	<input type="checkbox"/> 1 point
		Developments in related technologies are required first for testing	<input checked="" type="checkbox"/> 2 point
		Currently testing or planning to test	<input type="checkbox"/> 3 point
		Tested and obtained satisfactory results (Attach Documents)	<input type="checkbox"/> 5 point
		Preparing or currently implementing into one's business	<input type="checkbox"/> 7 point
	Effects	What is the level of improvement? (Simplification of processes, yield, cost etc.)	<input type="checkbox"/> 3 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 1 point
	Importance	Defending the rights in disclosing the technology	<input type="checkbox"/> 1 point
		Adaptable (or scheduled) for mass production	<input checked="" type="checkbox"/> 3 point
		Absolutely necessary to obtain exclusive technology	<input type="checkbox"/> 5 point
	Evaluation Result		(10) Point
Note: ※ The Invention Evaluation form must be filled out by the manager of the invention team. ※ Evidence is necessary for those inventions that are rated 5 or 7 points in the section of "Possibility for Implementation." ※ The Evaluation Result should be filled in only after completing the Evaluation.			
<Evaluation for Foreign Filing>			
Status of products to which the invention was applied	* Applied Product:	* For cases applied to multiple products, list all product names. For future cases to be applied, mark the estimated period.	
	* Related Technology:		
	* Applied Period:		
Evaluation	<input type="checkbox"/> Absolutely necessary <input type="checkbox"/> Observe for a year after filing domestically <input checked="" type="checkbox"/> Not necessary	Designation of Countries	
		1st Priority	
		2nd Priority	
	<input type="checkbox"/> Direct National Filing <input type="checkbox"/> EPO Filing <input type="checkbox"/> PCT Filing	3rd Priority	
		4th Priority	
		5th Priority	
	<u>Technological Factor</u>	6th Priority	
		7th Priority	
		8th Priority	
	<u>Economical Factor</u>	Evaluator Name: HWANG, Jong Ha Position: Department Manager Signature: <i>signed</i>	

Inventor Information	Primary Inventor	Name	(Korean) 구우석		(Software) Development Group (Call Processing) Team					
			(Chinese) 具佑奭		Position	DL	Employee ID No.	H17203	Tel (031-639-8012)	
			(English) Koo, Woo Seog		Residence ID		671006-1695616			
		E-mail	wskoo@hysyscomm.com	Address	(467-802) Jugong Apt. 115-303, 470 Anheung-dong, Icheon-si, Gyeonggi-do			Signature		
	Joint Inventor	Name	(Korean)		() Development Group () Team					
			(Chinese)		Position		Employee ID No.		Tel ()	
			(English)		Residence ID					%
		E-mail		Address				Signature		
		Name	(Korean)		() Development Group () Team					
			(Chinese)		Position		Employee ID No.		Tel ()	
			(English)		Residence ID					%
		E-mail		Address				Signature		
		Name	(Korean)		() Development Group () Team					
			(Chinese)		Position		Employee ID No.		Tel ()	
			(English)		Residence ID					%
		E-mail		Address				Signature		
Name	(Korean)		() Development Group () Team							
	(Chinese)		Position		Employee ID No.		Tel ()			
	(English)		Residence ID					%		
E-mail		Address				Signature				
Name	(Korean)		() Development Group () Team							
	(Chinese)		Position		Employee ID No.		Tel ()			
	(English)		Residence ID					%		
E-mail		Address				Signature				

Note: 1. The full address and e-mail address are required.
2. Write the full name in English.

직무 발명 신고서

신고일: 2002년 월 일

발 명 실	결 재	업무코드		승인권자	현 장 관 리 자	경 토	법 제 특 허 부	결 재	업무코드		승인권자
		주발명자	경도	팀장					기안	검토	승인
	직위/성명	DL/구우석	CJ/임성환	BJ/황종하	/	직위/성명	gw0301	1.3.5.10.영구	보안등급	1.2.3 대외비	
	일 자	11/29	11/29	11/29	관리번호	일 자					
	보존년한	0.1.2.3.5.10.영구				보존년한	1.3.5.10.영구	보안등급	1.2.3 대외비		

사내 직무발명보상기준에 의거하여 출원/등록을 의뢰하며, 국내/외 등록권리를 양도합니다.

발 명 자 기 재 사 항	발명의 명칭	EV-00 시스템의 제어국의 SF와 기지국의 채널카드 간의 ATM 트래픽 채널 패스 설정 방법		
	발명의 개요	본 발명은 Qualcomm의 EV-00 시스템을 근간으로 ATM 통신망을 기반으로 하여 상용화하는 과정에서 설계 및 구현된 제어국의 SF 블록과 기지국의 채널카드 블록(HCCA)간의 ATM 패스 설정 및 패스 설정을 위한 정보 교환 방법에 관한 내용을 특허로 한다.		
	관련PROJECT명	EV-00		
	실시상황	<input type="checkbox"/> 착상 <input type="checkbox"/> 설계완료 <input type="checkbox"/> 시험(중, 완료) <input checked="" type="checkbox"/> 사업화(준비중, 실시중)		
	본발명의 발표상황	<input checked="" type="checkbox"/> 미발표 <input type="checkbox"/> 발표예정 <input type="checkbox"/> 既발표 ※ 既발표 또는 발표 예정인 경우 발표(예정)일과 관련논문등 기입 요망 [발표(예정)일: 2000년 월 일, 관련논문:]		
	선행특허자료	국 내		
		외 국		
출원완급	<input type="checkbox"/> 보 통 <input type="checkbox"/> 지 급-->(일이내)		지급출원	
			이 유	
	외국출원 <input checked="" type="checkbox"/> 유 (이유: EV-00관련 최근 기술임.) <input type="checkbox"/> 무			
	KEY WORD			

법 제 특 허 부 기 재 사 항	접 수 일	2002년 11월 20일	대리인	윤 승 영	전담자관리번호	1122002-P-0182	
	국내출원	<input checked="" type="checkbox"/> 특허 <input type="checkbox"/> 실용 <input type="checkbox"/> 공개기보 <input type="checkbox"/> 출원보류(이유:)					
		심사청구	<input type="checkbox"/> 유 <input checked="" type="checkbox"/> 무		전략특허PROJECT명	14	
	외국출원	<input type="checkbox"/> 유 <input type="checkbox"/> 무		출원등급	B		
		심의여부	<input type="checkbox"/> 유 <input type="checkbox"/> 무		*대리인 특허명세서작성 참조사항*		
	출 원 국 가 선 정	<input type="checkbox"/> 개별국출원 <input type="checkbox"/> EP0출원 <input type="checkbox"/> PCT출원		<input type="checkbox"/> 사무소 자체 국내출원 <input checked="" type="checkbox"/> 특허팅검토후 국내출원 <input type="checkbox"/> 국내외 동시출원			
		1순위		5순위		검 토 의 견	OK
2순위			6순위				
3순위			7순위				
4순위			8순위				
비고							

발명실장
기재사항

< 발명 평가내용 >

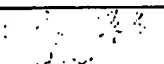

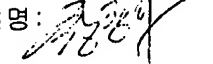
구 분	내 용	평가점수
기 술 성	단순 조합 기술임	<input type="checkbox"/> 1점
	약간 높은 수준을 요하는 기술임	<input checked="" type="checkbox"/> 3점
	고도의 수준을 요하는 기술임	<input type="checkbox"/> 5점
실현가능성	이론상 실현은 가능하나, 실험계획은 없음	<input type="checkbox"/> 1점
	테스트 하려면 관련기술의 발전이 요구됨	<input checked="" type="checkbox"/> 2점
	테스트중이거나 예정임	<input type="checkbox"/> 3점
	양호한 테스트 결과 얻음(자료첨부 가능)	<input type="checkbox"/> 5점
	현재 사업화 준비중 또는 실시중임	<input type="checkbox"/> 7점
효 과	개선된 효과의 수준은? (공정 단순화, Yield, Cost 등의 측면)	<input type="checkbox"/> 3점 <input checked="" type="checkbox"/> 2점 <input type="checkbox"/> 1점
발명중요도	기술공개로 타사 권리확보를 방어하는 수준임	<input type="checkbox"/> 1점
	양산에 적용(예정) 가능한 발명임	<input checked="" type="checkbox"/> 3점
	반드시 필요한 독점 기술임	<input type="checkbox"/> 5점
평가결과		(10) 점

주)※상기 발명 평가표는 반드시 실장이 직접 기재하시기 바랍니다.

※"실현가능성"란에서 5점,7점에 해당된 발명은 증빙 자료가 반드시 필요 합니다.

※평가를 완료하신후 평가결과를 기입 바랍니다.

< 외국출원 평가내용 >

발명의 적용제품 현 황	*적용제품: *관련기술: *적용시기:	*복수제품에 적용되는 경우 전부 기재하시기 바라며, 향후 적용 제품경우 예상시점을 기재요망	
평가내용	<input type="checkbox"/> 절대 필요 <input type="checkbox"/> 국내출원후 1년간 관망 <input checked="" type="checkbox"/> 필요 없음		출원희망국가
	<input type="checkbox"/> 개별국출원, <input type="checkbox"/> EPO출원, <input type="checkbox"/> PCT출원 기술적측면		1순위
			2순위
			3순위
			4순위
			5순위
			6순위
			7순위
			8순위
	경제적측면		평가자
			성명: 
			직위: 
			서명: 

발명자 인적사항	발명자 1	성명	(한글) 구우석		(소프트웨어) 개발 Group (호처리)실					
			(한문) 具佑奭		직위	대리	사번	H17203	TEL (031-639-8012)	
			(영문) Koo, Woo Seog		주민등록No		671006- 442345			
		E-mail	wskoo@hysyscomm.com		주소	(467-802)경기 이천 안흥470 주공APT 115-303				서명
	발명자 2	성명	(한글)		() 개발 Group ()실					
			(한문)		직위		사번		TEL ()	
			(영문)		주민등록No		-			
		E-mail		주소	(-)				서명	
	발명자 3	성명	(한글)		() 개발 Group ()실					
			(한문)		직위		사번		TEL ()	
			(영문)		주민등록No		-			
		E-mail		주소	(-)				서명	
	발명자 4	성명	(한글)		() 개발 Group ()실					
			(한문)		직위		사번		TEL ()	
			(영문)		주민등록No		-			
		E-mail		주소	(-)				서명	
	발명자 5	성명	(한글)		() 개발 Group ()실					
			(한문)		직위		사번		TEL ()	
			(영문)		주민등록No		-			
		E-mail		주소	(-)				서명	
	발명자 6	성명	(한글)		() 개발 Group ()실					
			(한문)		직위		사번		TEL ()	
			(영문)		주민등록No		-			
		E-mail		주소	(-)				서명	

※1. 주소는 상세히 기재하시고, E-mail은 반드시 회사계정으로 기재하시기 바람.

2. 영문기재시 Fullname을 기재하시기 바람.

발명의 명세서

1. 발명의 명칭

EV-DO 시스템의 제어국의 SF와 기지국의 채널카드 간의 ATM 트래픽 채널 패스 설정 방법

2. 발명의 상세한 설명

1) 산업상의 이용분야

ATM 망을 기반으로 하는 EV-DO 시스템에서 기지국과 제어국간 ATM 트래픽 패스 설정에 이용할 수 있다.

2) 기술의 설명 및 그 문제점

EV-DO 시스템의 초기 모델인 Qualcomm 사의 EV-DO 제품은 IP 통신망을 기반으로 설계 및 구현되어 있다. 그러나 필요에 따라 다른 프로토콜 인터페이스를 기반으로 통신을 처리할 필요가 있다. 특히 ATM 망을 기반으로 통신을 설정하는 경우 모든 것이 새롭게 설계 구현되어야 한다.

본 발명은 Qualcomm 의 EV-DO 시스템을 근간으로 ATM 통신망을 기반으로 하여 상용화하는 과정에서 설계 및 구현된 제어국의 SF 블록과 기지국의 채널카드 블록(HCCA)간의 ATM 패스 설정 및 패스 설정을 위한 정보 교환 방법에 관한 내용을 특허로 한다.

3) 문제점을 해결하기 위한 본 발명의 기술적 원리

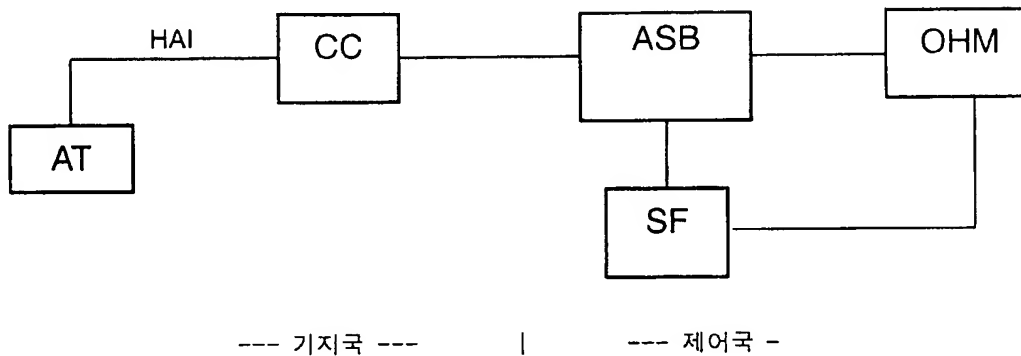
본 발명의 기술적 원리는 기존의 기지국과 제어국간의 메시지를 변경하고 추가하여 해당 ATM 패스 정보를 추가로 교환하는 방법을 이용하고 있다. 즉, 제어국 SF 블록은 기지국의 채널카드와 ATM 패스를 설정하기 위하여 채널카드의 ATM 패스 정보가 필요하다. 그래서 기존 메시지를 최대한 반영하고 새롭게 메시지를 추가하여 ATM 패스 정보를 교환한 다음 ATM 경로를 동적으로 세팅한다.

4)본 발명의 구성 및 그 전반적인 동작설명

1. 전체 시스템 구조

EV-DO 시스템의 SF 블록은 제어국에 위치하고 있다. 채널카드 블록(HCCA)는 기지국에 위치하고 있다. 채널카드 블록은 단말기(AT: Access Terminal)와 SF 블록간의 중계 역할을 한다.

SF와 채널카드 블록 및 기타 엔티티 간의 상호 관계는 다음과 같다.

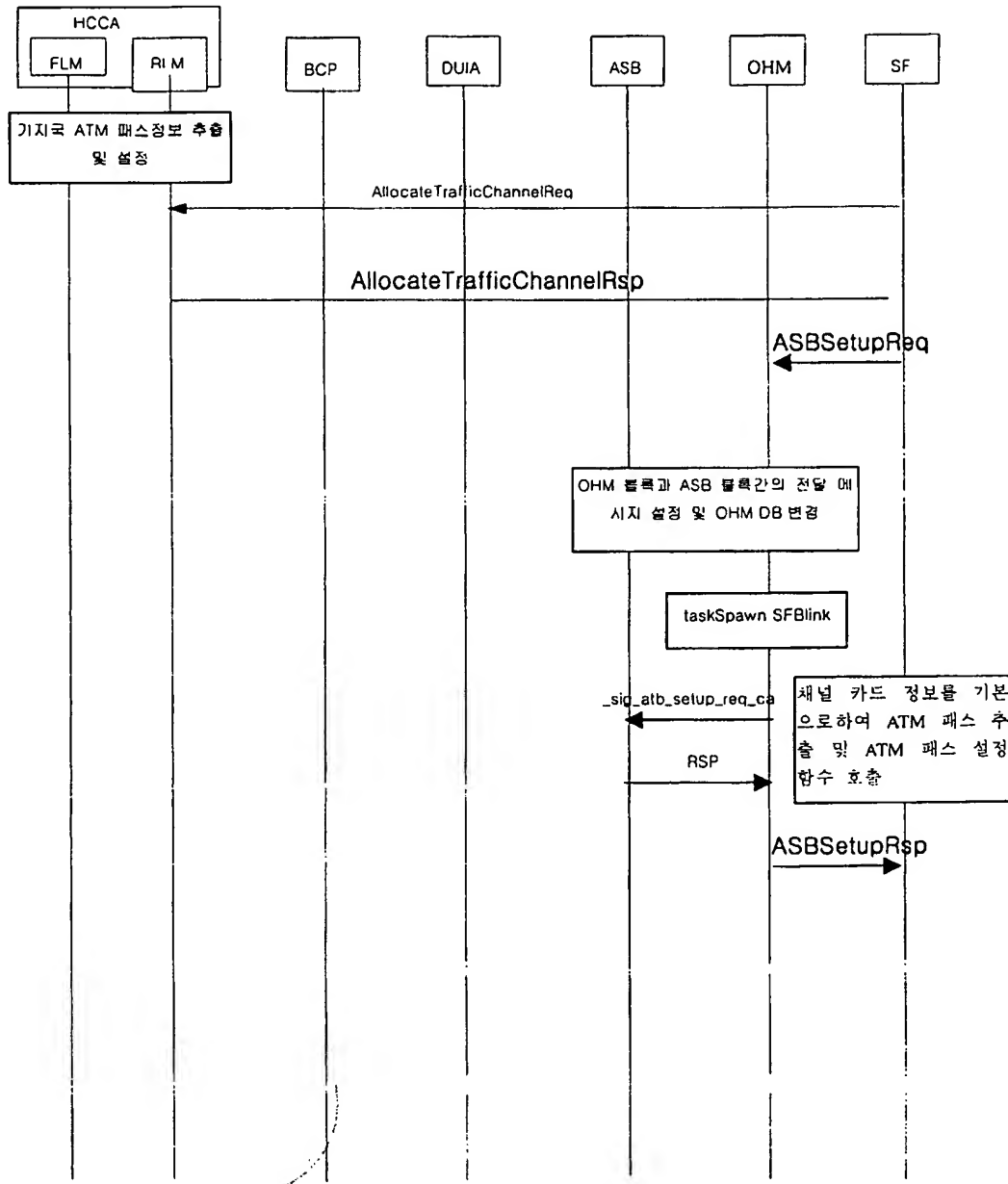


<SF, CC, OHM, ASB(ATM Switch Block) 관계도>

전체 시스템 구성 중 기지국의 ATM 설정과 제어국의 ATM 패스 설정이 필요한데, 본 발명에서는 제어국의 ATM 패스설정에 관한 내용만 발명으로 한다.

2. SF S/W 블록간 메시지 흐름

다음 호처리 흐름도는 단말로부터의 호 설정 메시지를 수신하여 처리하는 과정 중 ATM 패스 설정을 위한 메시지 흐름도를 중심으로 표현한 내용이다. (굵은 표시 메시지가 추가 및 변경된 호처리 메시지)



<ATM S/W 설정을 위한 호처리 메시지 흐름도>

3. 블록간 메시지

3.1 AllocateTrafficChannelRsp Message (변경된 메시지)

전송방향 : 기지국(채널블록) → 제어국(SF 블록)

Type	Attribute	Value
word16	functionId	2501
word32	callId	
word16	RSMId	0 ~ 7
word16	pilotOffset	
byte	status	
byte	powerControlBitNumber	
word32	FLMIPAddress	
word16	ftcServerPort	
word32	RLMIPAddress	
word16	rxServerPort	
추가 항목		
byte	bcpld	0 ~ 64
byte	bisSectorIdx	0 ~ 2
byte	ftc_ccld	0 ~ 1
byte	ftc_celd	0 ~ 64
byte	ftcBaiald	0 ~ 1
byte	ftcLinkId	0 ~ 7
byte	rx_ccld	0 ~ 1
byte	rx_celd	0 ~ 64
byte	rxBaiald	0 ~ 1
byte	rxLinkId	0 ~ 7

3.2 ASBSetupReq (신규 메시지)

전송방향 : 제어국(SF 블록) → 제어국(OHM 블록)

Type	Attribute	Value
word16	RsmId	0 ~ 7
byte	Bcpld	0 ~ 64
byte	SectorId	0 ~ 2
byte	FtcCcld	0 ~ 1
byte	FtcCeld	0 ~ 64
byte	FtcBaiald	0 ~ 1
byte	FtcBlinkId	0 ~ 7
byte	FtcSfPortId	0 ~ 2
byte	RxcCcld	0 ~ 1
byte	RxcCeld	0 ~ 64
byte	RxcBaiald	0 ~ 1
byte	RxcBlinkId	0 ~ 7
byte	RxcSfPortId	0 ~ 2

3.3 ASBSetupRsp (신규 메시지)

전송방향 : 제어국(SF 블록) ← 제어국(OHM 블록)

Type	Attribute	Value
word16	<i>Rsmld</i>	0 ~ 7
byte	<i>Result</i>	0: Fail, 1: Success
word16	<i>FtcSfToAtbVpi</i>	0 ~ 512
word16	<i>FtcSfToAtbVci</i>	0 ~ 1024
word16	<i>RxcSfToAtbVpi</i>	0 ~ 512
word16	<i>RxcSfToAtbVci</i>	0 ~ 1024

5)본 발명의 다른 실시예

없음.

6)본 발명의 효과

EV-DO 시스템을 ATM 통신망을 기반으로 하는 통신망에서 기지국과 제어국간에 ATM 패스 설정할 때 이용할 수 있다. IP 기반의 통신망에서 ATM 기반의 통신망으로 전환할 때 최소의 변경으로 가능하다.

3.발명의 권리보호 범위

본 발명 전체, ATM 인터페이스 설정을 위하여 추가 변경된 메시지 부분, ATM 경로 설정을 위하여 추가된 블록간의 메시지 부분.

4.도면의 간단한 설명

없음.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

OCTOBER 23, 2006

PTAS

MCDONNELL BOEHNNEN HULBERT & BERGHOFF LLP
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ROBERT J. IRVINE III
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NUMBER OF PAGES: 51

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ASSIGNOR:
HYUNDAI SYSCOMM, INC.

DOC DATE: 04/27/2004

ASSIGNEE:
UTSTARCOM KOREA LIMITED
SAN 136-1, AMI-RI, BUBAL-EUB,
ICHEON-SI
KYONGKI-DO, DEM REP OF KOREA

467-701

SERIAL NUMBER: 10556274
PATENT NUMBER:
TITLE: METHOD FOR CALL COMPLETION SERVICE

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 10545578
PATENT NUMBER:
TITLE: ATM SWITCH FOR USE IN W-CDMA

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 10545922
PATENT NUMBER:
TITLE: METHOD FOR STABILIZING BTS USING E1 TRUNK BOARD DUPLEXING OF BSC

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 10545505
PATENT NUMBER:
TITLE: METHOD FOR OPTIMIZING A DSP INPUT CLOCK USING A COMPARING/ANALYZING CIRCUIT

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 10560142
PATENT NUMBER:
TITLE: METHOD FOR ESTABLISHING AN ATM TRAFFIC CHANNEL PATH BETWEEN A BSC AND A BTS IN AN EV-DO SYSTEM

FILING DATE:
ISSUE DATE:

ASSIGNMENT SERVICES BRANCH
PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

10/23/2006
 500168441

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Hyundai Syscomm, Inc.	04/27/2004
RECEIVING PARTY DATA	
Name:	UTStarcom Korea Limited
Street Address:	San 136-1, Ami-Ri, Bubal-eub, Icheon-si
City:	Kyongki-do
State/Country:	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
Postal Code:	467-701
PROPERTY NUMBERS Total: 5	
Property Type	Number
Application Number:	10556274
Application Number:	10545578
Application Number:	10545922
Application Number:	10545505
Application Number:	10560142
CORRESPONDENCE DATA	
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NAME OF SUBMITTER:	Robert J. Irvine III

CH \$200.00 10556274

Total Attachments: 49

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[제41호서식]

공증인가
법무법인 **대중종합법률사무소**

서울·종로구 당주동 160
(변호사회관 303호)
[공증부 736-6604]

Registered No. 2004 - 6060

NOTARIAL CERTIFICATE

DAE JONG LEGAL CORPORATION

160, Dang Joo-Dong, Jong Ro-Ku,
Seoul, Korea



KIM & CHANG

Hannuri Building, 219 Naeja-dong, Jongno-gu, Seoul 110-053, Korea
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E-Mail: all@ip.kimchang.com

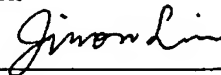
DECLARATION

I, the undersigned, hereby declare:

- (1) That my name, mailing address and citizenship are as stated below;
- (2) That I am knowledgeable in both English and Korean, which are the languages used in relation to the Assignment filed with the Korean Intellectual Property Office; and
- (3) That I have translated said Assignment filed with the Korean Intellectual Property Office into English, a copy of which is attached hereto, and believe that said translation is a true and complete translation of the aforementioned Korean Assignment.

22nd day of November, 2004

Full name of the translator : LIM, Ji Won

Signature of the translator : 

Mailing address : c/o Kim & Chang, Hannuri Building, 219 Naeja-dong,
Jongno-gu, Seoul 110-053, Korea, Republic of Korea

Citizenship : Republic of Korea

KIM & CHANG

[Translation]

ASSIGNMENT

By this instrument, HYUNDAI SYSCOMM, INC., a corporation duly organized and existing under the Laws of Republic of Korea at San 136-1, Ami-ri, Bubal-eub, Icheon-si, Gyeonggi-do 467-701, Republic of Korea do hereby declare that on April 27, 2004 it has assigned and transferred all rights, title and interest in the cases as listed in the attached Schedule I to UTStarcom Korea Limited, a corporation duly organized and existing under the laws of Republic of Korea at San 136-1, Ami-ri, Bubal-eub, Icheon-si, Kyongki-do 467-701, Republic of Korea

IN WITNESS WHEREOF,

I have set my hand hereto this 27th day of April, 2004.

Assignor: HYUNDAI SYSCOMM INC.

By: (SEALED)

Typed Name: SEONG-IK JANG

Position: CEO & President

Schedule 1

no.	Korean Patent Application No.
1	1996009524
2	1996025985
3	1997007238
4	1997013781
5	1997055585
6	1997055586
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Schedule 1

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1327	2004002984
1328	2004002986